APPENDIX C
Allowable Activities/Training

I. Introduction

Allowable activities are those activities and purchases for which recipient jurisdictions will be allowed to use their Section 180(c) funds. The challenge in defining allowable activities is to strike a balance between meeting the recipients' need for flexibility and the funding agency's need to track measurable progress. More broadly defined activities allow the greatest flexibility for the recipient to tailor activities to their needs. More narrowly defined activities make the funds easier to track for the Federal agency but limit the recipient's flexibility.

There also are legal requirements that bound the range of allowable activities. Good grants practices require that funds be used to address only those needs caused by the shipments, often referred to as "the increment of training necessary to prepare for Nuclear Waste Policy Act (NWPA) shipments". And, in accordance with the language in Section 180(c) of the NWPA, training must cover procedures for emergency response and safe routine transportation for state, tribal, and local public safety officials.

Some activities that states and tribes will conduct for these shipments fall outside the legal mandate of Section 180(c), yet are essential to the development of a complete transportation system. The funding for those activities is discussed in a separate issue paper titled "Funding Operations-Related Activities".

II. Background

This section describes other grant programs' approaches to defining allowable activities. The programs studied are the *1998 Revised Proposed Policy and Procedures*, the Consolidated Grant initiative, the Waste Isolation Pilot Plant, and the U.S. DOT's Hazardous Materials Emergency Preparedness Program.

Most grant programs give general guidance on allowable activities. The administering federal agency uses the grant application and reporting requirements to verify that funds are used to meet program goals.

- *1998 Revised Proposed Policy and Procedures*

OCRWM's *1998 Draft Policy* was the most prescriptive of the grant programs studied in two specific areas. It specified the level of training and who could receive the training. It disallowed training for hospital personnel and prescribed the percentage of funds available for equipment purchases.

The list below summarizes the allowable activities of the *1998 Draft Policy*:

Planning Grant
- Staff costs
- Travel costs
- Costs associated with conducting a needs assessment of incremental training needs
- Risk assessment and other assessment activities

Base Grant
- Staff costs
- Travel costs
- Costs associated with preparing to train public safety officials
- Planning and coordination activities associated with interacting with local jurisdictions and neighboring jurisdictions
- Risk assessment and other assessment activities

Variable Grant
- Travel and tuition costs for those receiving training.
- Drills and exercises associated with training.
- Training on a satellite tracking system.

Training Activities
- Emergency response – awareness level training[1] for all local jurisdictions, operations or technician level only if funds available. It is recipient's choice regarding who gets trained, where, and with what curriculum.
- Safe routine transportation – training for safety and enforcement inspections for highway and rail.
- Refresher training.
- Emergency medical responders.
- Equipment – training related, 25% of total funds for two years prior to shipments and 10% of total funds once shipments begin.
- Additional technical assistance where basic infrastructure is lacking.

The 1998 Draft Policy list of allowable activities was meant to be representative of allowable activities, not an exhaustive list.

- *DOE Consolidated Grant Initiative (never implemented)*

The Consolidated Grant Initiative defined allowable activities broadly, including allowing hospital personnel to be trained and requiring no percentage caps on equipment purchases.

The primary difference between the allowable activities in the Consolidated Grant and the *1998 Draft Policy* is that the Consolidated Grant program would not have limited the

[1] Awareness, operations, and technician level training as defined in 29 CFR 1910.120(q).

level of training, type of training, or who received training. In contrast, the *1998 Draft Policy* expressly mentions the training levels allowable – awareness level training, and operations and technician level training only if funds remain after awareness level training is completed. It also restricts the recipients of training to "emergency response personnel" and "emergency medical responders". While not stated in the *1998 Draft Policy*, this wording would exclude hospital personnel based on a decision from General Counsel.

- *Waste Isolation Pilot Plant*

The states' involvement with the WIPP Program began with the Western Governors' 1989 Report to Congress, which was initiated pursuant to a DOT grant. The key areas of the program outlined in the Report included accident prevention, emergency preparedness, public information, and other related state and regional activities. In 1992, the WIPP Land Withdrawal Act directed the Department of Energy to "provide technical assistance and funds" for training, equipment purchases and operational safety programs. The Western Governors' Association, in conjunction with DOE Carlsbad, subsequently developed a Program Implementation Guide, which has been signed by the Secretary of Energy and approved by all impacted states. WIPP staff work with states, regional group staff, and tribal officials to develop annual work plans based on the original program design. Allowed activities are not strictly defined, but are derived from those discussions. In the experience of some Topic Group members, states and tribes spent a higher percentage of their funds on equipment in the early years than in later years when more funding is directed towards training and personnel costs. The amount of time required to negotiate the annual work plans has diminished as the program has matured.

WIPP offers a number of training courses for local officials along shipping routes. The primary radiological course, called Modular Emergency Response Radiological Transportation Training (MERRTT), was developed through the DOE Transportation Emergency Preparedness Program (TEPP). States may request MERRTT training through DOE contractors, conduct Train-The-Trainer courses for state and local instructors, or incorporate MERRTT material into their own training curricula.

- *Cesium Capsule Urgent Return Shipping Campaign*

DOE made monies available through the WGA WIPP Cooperative Agreement for planning for the Cesium shipments. This planning included development of a comprehensive transportation plan to address dispatch, bad weather and road conditions, safe parking, tracking, emergency response, and public information. DOE developed a specialized training program and provided the training program to state and local officials and emergency response personnel.

- *U.S. Department of Transportation's Hazardous Materials Emergency Preparedness Program*

This operational concept of this grant program has been suggested as a model for the Section 180(c) program.

The HMEP program defines allowable activities broadly. Examples include[2]:

- Management activities associated with the pass-through of funds to the Local Emergency Planning Committees.
- An assessment of the need for regional hazardous materials emergency response teams.
- An assessment of local response capabilities.
- Development and delivery of training to the public sector employees according to the priority needs and requests of the Local Emergency Planning Committees.
- Management of the training effort to achieve increased benefits, proficiency, and rapid deployment of public service employees who respond to accidents and incidents involving hazardous materials.
- Emergency response drills and exercises associated with training, a specific course offering, and tests and evaluation of emergency preparedness plans.

III. Options Considered

There are almost limitless derivations of allowable activities that could be considered. Since it is impractical to consider every permutation of activities, training, or purchases a grantee may request, the Topic Group focused their discussion on the tradeoffs between broadly and narrowly defined activities, analyzing four topics in depth -- the level of allowable training, the recipients of training, staff time, and the purchase and use of equipment. This section describes the options and the information the Topic Group used to make its recommendation.

Option 1: Narrowly defined allowable activities. Under this option, DOE would provide guidance on who should receive training, the level of training allowed, and what, if any staff time would be allowed, and strictly limit equipment purchases and uses.

Strengths:

- DOE can easily track how funds are used.

Weaknesses:

- Recipient jurisdictions do not have the flexibility to direct funds toward their needs. Grants can lose their effectiveness if the allowable activities cannot accommodate the variety of training and emergency response structures that exist among states and tribes.

[2] U.S. Department of Transportation's Hazardous Materials Application Kit Guidance.

- This approach is not widely used by federal grant programs.

Option 2: Broadly defined allowable activities. Under this option, DOE would provide categories with general guidance on allowable activities. The grant recipient would demonstrate in the grant application and through reporting requirements that their activities comply with program goals. This approach is widely used by federal grant programs.

Strengths:

- Grant recipients can apply funds to specific needs, increasing the effectiveness of the grant.

Weaknesses:

- It is harder for the administering federal agency to ensure that recipients use funds to meet program goals.
- Requires the federal agency to judge the reasonableness of a grant applicant's proposed activities.

Level of Training:

OCRWM could choose two different approaches to define the level of training that Section 180(c) would fund. The more narrowly defined approach, as was taken in the *1998 Draft Policy*, prescribes a specific level of training, such as awareness or operations level training. The other approach is to let recipients choose the training level but require that all training obtained with Section 180(c) funds have certain restrictions such as being compliant with OSHA 1910.120 standards, that only responders that would be expected to respond to the incident would be eligible for training, and that the applicant indicate in the application package what training they intend to acquire and how that is consistent with their current emergency response plans and procedures. The Group favored the latter.

Volunteer versus Career Fire Fighters

Ninety percent of fire fighters in the U.S. are volunteers who are estimated to have a 50% annual turn over rate, limited time available for training, limited resources to *access* training, and, therefore, limited emergency response capability. The training level most often mentioned for these responders is the awareness level. This frequently fits with the response capabilities of a volunteer force – they can conduct lifesaving operations, isolate the scene, and call a hazardous materials response team – and can be offered economically. If a higher level of training is required just for NWPA shipments, it could require restructuring the emergency response plans and procedures of these volunteer forces. This creates a strain on the agencies' resources and potentially conflicts with their more immediate public safety concerns.

Career fire fighters often are called upon to have a higher level of hazardous materials training but have limited time available for training, as do volunteers. The training requirements for a fire-fighter depend on what the jurisdiction decides is the responder's role in an emergency. The focus on WMD training has further strained the training schedule of all departments. For DOE to require a certain level of training specific to radioactive materials could be met with resistance from jurisdictions with too little time available to train to more immediate hazards. Allowing jurisdictions to decide the level of training could provide sufficient flexibility to ensure recipients can fold shipment-specific information into their existing training programs.

Emergency Response Structure

The difference in emergency response protocols among the states presents another reason to allow the recipients to choose their appropriate training level.. Response methodology varies from state to state. In some states trained escorts provide on-scene technical assistance to local responders. Other states use regional or designated hazardous materials teams. Still in other states the local responders will be the only response. The only commonality is that local responders will, in virtually all cases, play some response role, whether it is law enforcement, fire suppression, hazardous materials team, or rescue/EMS.

The third reason to give recipients latitude in choosing the appropriate level of training is that there is no one national standard that dictates the role of emergency responders. Federal law currently gives the employer the responsibility for defining a responder's activities and therefore their training requirements. If Section 180(c) training requirements create a standard of its own, it could be in conflict with OSHA 1910.120 and related standards (see text box for an explanation of the current national standards and guidelines). The language from the *1998 Draft Policy*, that the selected training program would be left to the discretion of the recipient, is consistent with the Topic Group recommendations.

Training Recipients:

Defining who should receive training under Section 180(c) is closely related to the question of what level of training should be available. The Topic Group came up with an exhaustive list of options that can be viewed in Chart 1. Under the broad definition of allowable activities each grantee would likely include different personnel in the training, depending on their emergency response structure and the roles assigned various public safety officials and the group favored this.

The Topic Group felt strongly that hospital personnel should be eligible to receive training if a jurisdiction felt that was necessary. The reasoning for this is discussed in detail in Appendix D, *Definitions.*

Staff Time:

The meaning of "staff time" as an allowable activity was discussed. Staff time could mean anything from paying the salary of a state official to administer the Section 180(c) program, to paying overtime to local fire fighters to cover shifts while their colleagues attend training related to Section 180(c), to paying fire fighter salaries while they attend training. The *1998 Draft Policy* did allow staff time but did not define what it meant. Options for staff time include:

- Retain the *1998 Draft Policy* language where the phrase is undefined and review each applicant's grant application.
- Define staff time as time spent on preparation for or provision of training but not the staff time of the recipients of the training.
- Define staff time as any time spent in preparation for or provision of training or salaries of the recipients of the training.
- Define staff time as any time spent in preparation for or provision of training, recipients of the training, and while conducting the activity for which one was trained such as conducting inspections or responding to an emergency.
    - Section 180(c) states that the program is "for training". This makes it unlikely that Section 180(c) funds could be used to pay staff salaries during the conduct of inspections or responding to an emergency involving NWPA shipments.

One way to encourage public safety officials to train on their own time or on regular duty is to extend credit for taking Section 180(c)-related training. DOE can offer credit for MERRTT classes but other types of credit, college or continuing education credit, must be offered by the jurisdiction. DOE's can encourage recipients to make credit available for Section 180(c) training so that the cost of training staff could be reduced. In addition, Section 180(c) could cover the administrative cost of getting Section 180(c)-related courses eligible for credit.

Equipment:

The Topic Group requests that there be no limit on the percentage of funds available to purchase equipment. The *1998 Draft Policy* had limited equipment purchases to 25% of funds for "training-related" equipment the first two years of the base grant and 10% of funds every year after that. The reasoning was that most jurisdictions should already have the equipment needed for hazardous materials response because it can be assumed that most jurisdictions already have a hazardous materials response capability[3]. Therefore, with the exception of a few rural areas or tribal nations, there should be little need for equipment purchases[4]. The Topic Group felt that was an incorrect assumption. The Topic Group felt that, given the variety of preparedness levels and emergency

[3] The Department's reasoning was that the Section 180(c) program cannot be construed as a supplier of basic emergency response capability. Basic emergency response capability has always been the responsibility of the state, tribal, and local governments. They have been aided by other federal agencies that have as part of their mission the assistance of state, local, and tribal governments in attaining basic capabilities. (Federal Register, April 30, 1998, pp. 23759) AND PFS EIS, December 2001, NUREG – 1714, pp. 5-53.

[4] Op cit.

response structures, it would be more efficient if recipients made their own equipment purchase decisions with a review by the Department of Energy in the grant application.

Another question the Topic Group struggled with is what "training-related" equipment means, as stated in the *1998 Draft Policy*[5], and who determines whether equipment is training-related. The Topic Group agreed that the language from the *1998 Draft Policy* on "training-related" equipment should remain without defining "training-related" in order to preserve flexibility in meeting the unique needs of each applicant.

The application package could reflect what equipment will be purchased, who would use the equipment and how the plan is consistent with that state's emergency response plan. Equipment purchased for use at the local level requires the state coordinate with local jurisdictions to include that information into the application package. The same information would be provided for inspection-related equipment purchases, although this is primarily a state function and would not likely involve training local officials.

IV. Recommendations to Management

The Topic Group recommends that DOE allow a broad array of planning and training activities, providing the recipients flexibility to direct funds towards their individual needs. The Department would ensure compliance with program goals by requiring the applicant to describe proposed activities, training, and purchases in the application package.

The Topic Group further recommends that DOE award both planning grants and training grants, with a range of activities allowed under each type of grant. Funds from the planning grant can be carried over past the twelve month grant period since, for some states, planning will take more than one year.

The Topic Group further recommends that DOE let the recipients of the grant decide who should be trained along the shipping routes, to what level, and with what curriculum.

The Topic Group further recommends that hospital personnel be included in the definition of "public safety official," thereby making training for hospital personnel an allowable activity under the 180(c) program.

The Topic Group further recommends that there be no caps on the percentage of the grant that can be used to purchase, calibrate, and maintain equipment as long as the equipment is training-related.

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[5] The language from the *1998 Draft Policy* reads "Regarding equipment, a grantee would be able to budget, for TY-2 and TY-1, 25 percent of each year's total Section 180(c) funds to purchase appropriate (i.e., training-related) equipment and supplies. Such equipment could also be used for inspections and for responding to emergencies. .."

The recommended general descriptions for each category of grant covers all modes – rail, truck, and barge -- and are as follows:

Planning Grants

The Topic Group recommends DOE allow states and tribes to engage in a broad array of planning activities, consistent with past DOE shipping campaigns. Potential activities, based on prior DOE transportation efforts, could include:

- Participation in DOE, regional, and national transportation planning meetings.
- Intra-state and tribal planning and coordination.
- Inter-state and tribal planning and coordination.
- The activities described in the definition of Technical Assistance.
- Review of DOE transportation, emergency management, communications, and security plans, including threat assessments and civil disobedience/law enforcement planning.
- Obtaining access to DOE data and systems, such as TRANSCOM (equipment and phone links) for information and shipment tracking.
- Evaluation and identification of alternative routes for DOE non-classified radioactive materials shipments according to HM-164.
- Risk assessments.
- Participation in DOE's Transportation Emergency Preparedness Program (TEPP).
- Coordination with DOE's Regional Assistance Program (RAP) training, exercises, and planning activities.
- Work with TRAGIS or other DOE route or risk assessment models used in preparing for training.
- Activities related to accident prevention (e.g., planning for safe parking, bad weather, and road conditions).
- Participation in carrier evaluation programs that may be implemented.
- Train-the-trainer classes.
- Staff costs.

Training Grants

Training for Safe Routine Transportation

- The planning activities begun in the planning grant may be continued under the training grants.
- Training and staff costs associated with the U.S. Department of Transportation's (DOT) State Rail Safety Participation Program. The Federal Railroad Administration will provide informal outreach and training opportunities to tribal nations, since there is no statutory authority for participation by Indian tribes in the State Safety Participation Program as outlined in 49 CFR 212.
- Training for public safety officials in safety and enforcement inspections of highway shipments (drivers, vehicles, and shipping containers), including

participation and support for Commercial Vehicle Safety Alliance (CVSA) activities such as training assessment, delivery, and monitoring.
- Training for appropriate local and state officials on the proper handling of information and documents, including secure and confidential shipments.
- Training for radiological inspections, both rail and truck.
- Training on a satellite tracking system.
- Equipment purchases, calibration, maintenance, and replacement.
- Staff costs.

Training for Emergency Response Procedures
- Planning activities begun in the planning grant may be continued under the training grants.
- Development of mutual aid agreements among neighboring jurisdictions and agreements with federal agencies.
- Development/enhancement of emergency response plans and procedures, including conduct of capabilities/vulnerability/needs assessment.
- Training for public safety officials in hazardous materials emergency response procedures. The training should be consistent with 29 CFR 1910.120 and the jurisdiction's emergency response plans.
- Participation in DOE's Transportation Emergency Preparedness Program (TEPP).
- Equipment purchases without percentage caps (see explanation above).
- Training for hospital personnel and emergency medical technicians.
- Designing, conducting, and evaluating drills and exercises.
- Staff costs.

Training Standards for Emergency Response Procedures

These standards are for general hazardous materials response, not for radioactive materials specifically.

- *OSHA 29 CFR 1910.120/29 U.S.C. 651 et seq. and EPA 40 CFR 311/42 U.S.C. 11011 et seq.*

OSHA and/or EPA regulations provide the employer responsibility for deciding if and at what level their employees will respond to an emergency and therefore the certification level of training they must receive. State and local fire departments, including volunteers, are required to follow OSHA regulations (29 CFR 1910) and/or EPA EPCRA (40 CFR311/42 U.S.C. 11011 et seq.) for responding to hazardous materials emergencies.

The training level required for each responder is based on the duties and functions to be performed by each responder as defined by the employer. Urban fire departments (that cover the majority of the population distributed along a route) often have hazardous materials teams trained at all OSHA levels. Some departments choose to only train to the awareness level, citing lack of sufficient funds, despite hazards located in their community. The standard defines the skills and knowledge levels required for various responders before they are permitted to take part in actual emergency operations on an incident:

- First responder awareness level
- First responder operations level
- Hazardous materials technician
- Hazardous materials specialist
- On scene incident commander

National Fire Protection Association (NFPA) Standards

NFPA 471 – Recommended Practice for Responding to Hazardous Materials Incidents
NFPA 472 – Standard for Professional Competence of Responders to Hazardous Materials Incidents
NFPA 473 – Standard for Competencies for EMS Personnel Responding to Hazardous Materials Incidents
NFPA 1600 – Disaster/Emergency Management and Business Continuity Programs

These standards are derived from OSHA 29 CRF 1910.120 and have been widely, although not universally, adopted in the emergency response community. The standards for competencies are tied to the duties and functions of the responder, and a jurisdiction with limited resources may choose to limit the duties and functions of its responders.

Presidential Initiatives Related to Training Standards

Whether OSHA and NFPA remain the standards for emergency response to a hazardous materials accident depends on how the Department of Homeland Security (DHS) implements Homeland Security Presidential Directives #5 and #8. These Directives require that federal agencies "shall establish and maintain a comprehensive training program to meet the national preparedness goal**.** The program will ***identify standards*** and maximize the effectiveness of existing federal programs

and financial assistance and include training for the Nation's first responders, officials, and others with major event preparedness, prevention, response, and recovery roles."

The DOE will monitor development of these training standards and what impact, if any, the standards might have on training suitable for Section 180(c) purposes.

Chart 1

The table below lists *all* the options the Topic Group considered when trying to arrive at its recommendation on training levels. Some of the options below were discarded because they were viewed as not being sufficiently training-related or are, in some way, outside the scope of Section 180(c). All training listed below refers to training in the radiological increment specific to NWPA shipments. The table includes all potential recipients of training and the level of training they could be eligible to receive.

Potential Recipient(s)	Potential Training Level(s)	Issues
Elected and appointed officials ▪ Local ▪ State ▪ Tribal	General information about shipments, arrangements.	
Emergency Response Personnel		
EMS personnel	Medical training for EMS personnel	In the 1990's, GC concluded that hospitals were ineligible.
Emergency room personnel	Medical training for emergency room personnel	
First responders	MERRTT or other incremental radiological training OSHA 29 CFR 1910.120 awareness level	
Hazmat teams	OSHA operations and/or technician level training.	
Public information officers	Template for SNF response or general awareness training (non-OSHA)	
9-1-1 operators	Risk communication training	
Local emergency management agency	General awareness training (non-OSHA)	
State emergency response personnel	All levels of OSHA hazmat training, drills, and exercises	
Tribal emergency response personnel	All levels of OSHA hazmat training, drills, and exercises	
State, Tribal, and local law enforcement personnel	All levels of OSHA hazmat training, drills, and exercises ▪ Refresher training on above listed items. ▪ Train-the-trainer on above listed items.	

Safe Routine Transportation Personnel		
▪ Truck inspectors	▪ State-required inspection training. ▪ CVSA training. ▪ Radiological inspection training	
▪ Rail inspectors	▪ FRA's State Participation Program. ▪ Radiological inspection training ▪ Satellite tracking system training. ▪ Awareness training – not OSHA-related but general information about the shipments. ▪ Refresher training as needed on above items.	▪ Tribes are not eligible to participate in FRA's Program. FRA is willing to provide informal training and technical assistance.
Public Information ▪ Media ▪ Civic Groups	▪ Fund state and local officials to respond to inquiries, public presentations about their jurisdictions emergency response and safe routine transportation preparations.	▪ These activities could be funded through the cooperative agreements, or DOE could choose to not fund them at all or could choose to fund them with non-180 (c) funds.